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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,402	10/31/2003	Man Soo Han	51876P399	3288
8791 7590 06/21/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER PATEL, CHANDRAHAS B	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 06/21/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/699,402

Applicant(s)

HAN ET AL.

Examiner

Chandahas Patel

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2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/31/2003.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Oki et al. (USPN 7,006,514, Herein as Oki).

**Regarding claim 1**, Oki teaches an input buffered switch using pipelined simple matching [Fig. 1, 100], comprising: a plurality of input means [Fig. 1, 110], each having a plurality of Virtual Output Queues (VOQs) for sending a request signal in every time slot when each VOQ has at least one cell [Fig. 1, 115], for outputting the cell according to a grant signal transmitted to each VOQ [Col. 5, lines 3-6]; a scheduling means for executing a contention process according to the request signals from each VOQ of the plurality of input means [Fig. 1, 120], sending contention results to the plurality of input means and sending switch operation information [Col. 5, lines 39-50]; and a switching means for outputting the cell received from the plurality of input means responsive to the switch operation information received from the scheduling means [Fig. 1, 130].

**Regarding claims 2 and 5**, Oki teaches a plurality of sub-scheduling means for executing a contention process for a plurality of time slots according to the request signals from each VOQ of the plurality of the input means in the manner that one sub-scheduler begins a contention process and another sub-scheduler finishes a contention process [Col. 5, lines 11-18,

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**arbitration process is the contention process, Request flag in shown at Fig. 2, 224]; and a multiplexing means for multiplexing a contention result of each sub-scheduling means to the plurality of input means [Col. 5, lines 62-67 – Col. 6, lines 1-3].**

**Regarding claims 3 and 9, Oki teaches sub-scheduling means gives priorities to each of the input means in case of the contention process to the same output [Col. 7, lines 13-16].**

**Regarding claims 4 and 10, Oki teaches each sends the request signal at every time slot by sending the number of cells waiting in the VOQ to the scheduling means [Col. 5, lines 39-50].**

**Regarding claims 6 and 11, Oki teaches sub-scheduling means gives a priority to the VOQ that has the largest number of awaiting cells in the VOQ in case of the contention process to the same output [Col. 6, lines 46-48, by serving request counter scheduler gives priority to longest VOQ].**

**Regarding claims 7 and 12, Oki teaches each sub-scheduling means gives a priority to each VOQ in the contention process to the same output [Col. 7, lines 13-16] and gives a priority to a VOQ that has the largest number of awaiting cells in the VOQ when the VOQ having the priority does not send the request signal [Col. 6, lines 46-52, reference teaches these management responsibilities can be run periodically and does not teach that VOQ is sending a signal having the priority].**

**Regarding claim 8, Oki teaches a contention method using pipelined simple matching in an input buffered switch [Abstract], comprising the steps of: a) at each VOQ that has at least one awaiting cell, sending a request signal to a sub-scheduling means that begins a contention process at every time slot [Col. 5, lines 11-18, arbitration process is the contention process];**

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b) at the sub-scheduling means, executing a contention process for a plurality of time slots according to the request signals from each VOQ that has at least one awaiting cell [Col. 5, lines 11-18, Request flag is shown in Fig. 2, 224]; c) at the sub-scheduling means that finishes the contention process, sending a contention result to each input means at every time slot [Col. 5, lines 62-67 – Col. 6, lines 1-3]; and d) at the transfer-granted VOQ, transferring the cell to the switching means according to the contention result [Fig. 1, 130].

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrahas Patel whose telephone number is 571-270-1211. The examiner can normally be reached on Monday through Thursday 7:30 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CBP

  
RICKY C. NGO  
SUPERVISORY PATENT EXAMINER